SECTION 05531

GRATINGS AND FLOOR PLATES

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Edit all parts of spec for desired materials, shapes and finishes.
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PART 1 GENERAL

1.1 SECTION INCLUDES

A. Formed steel gratings

B. Formed aluminum gratings

C. Molded glass fiber gratings

D. Fabricated steel floor plates

1.2 DESIGN REQUIREMENTS

A. Use ANSI/NAAMM A202.1 for design loads.

B. Design for live load of [100 psf]

C. Maximum deflection under live load is 1/240 of span

1.3 SUBMITTALS

A. Submit the following in accordance with the requirements of Section 01300.

1. Catalog data with details of grate construction, and span and deflection tables.

PART 2 PRODUCTS

2.1 GRATING MATERIALS

[A. Use formed and galvanized steel conforming to ASTM A36, G90.]

[B. Use formed aluminum conforming to ASTM B221, Alloy 6063-T6.]

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If glass fiber grating will be exposed to harsh chemicals, select the plastic binder to resist them.

C. Use molded glass fiber reinforced plastic conforming to [ ].
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D. Provide appropriate anchorage and splicing fittings.

2.2 FLOOR PLATE MATERIALS

A. Use diamond plate galvanized steel sheet conforming to ASTM A526, G90.

2.3 GRATING FABRICATION

A. Fabricate grating to accommodate design loads.

B. Mechanically clinch joints of intersecting metal grating sections.

C. Provide non-slip top surface.

2.4 FLOOR PLATE FABRICATION

A. Shear steel plate to size required, and grind edges to provide an ”eased” edge.

B. Galvanize after cutting and grinding.

PART 3 EXECUTION

3.1 INSPECTION

A. Verify that opening sizes and dimensional variations are acceptable to receive grating [floor plates].

B. Verify that supports are correctly positioned.

3.2 INSTALLATION

A. Install components in correct position, plumb and level.

B. Secure to prevent movement with appropriate fittings.

END OF SECTION